ABSTRACT

Setiorini, Dewi. 2015. Acoustic Analysis of Vowels Produced by EFL Students in UIN Sunan Ampel Surabaya.

Advisor: Endratno Pilih Swasono, M. Pd.

Key Words: Acoustic phonetics, Acoustic, EFL, ELF, Formant, Phoneme, Phonetics, Phonology, Praat Software, Spectrogram, and Vowel Quality.

This research focuses on English vowel /æ/ and /e/ quality based on the acoustic characteristics through their formant frequencies and the correlation between the average formant frequency of native speakers and the articulation of English vowel sound to know their vowel quality. This research focuses on vowel /æ/ and /e/.

The research uses a tool to identify the formant frequency of data sources called Praat. It is computer software that used for analyzing speech. The praat program is designed by Paul Boersma and David Weenink.

The result shows that the timbre of EFL university students of UIN Sunan Ampel Surabaya vowel (vowel quality) /e/ is same as /æ/. Most of them make large jaw opening with F1 around 700 Hz like /æ/.

This research uses descriptive qualitative method because analyzes the acoustic characteristics through participants own formant frequencies and the correlation between the average formant frequency of native speaker from Peter Ladefoged and the articulation of English vowel sound.

The writer hopes that this research will be useful and for further researchers it is important to be more careful in measuring sound to get accuracy and research not only on measuring vowel quality but also consonant quality.